# *'When three is not a crowd':*

# *Measuring shared fun in playful interactions between parents and infants.*

## Marialena Semitekolou[6]

### Abstract

The aim of this study was to determine how special relationships of friendship and creativity are built and strengthened, and how fun may give extra strong support to a group of more than two. Towards this aim, we measured facial expressions of the emotions of interest and enjoyment in spontaneous dyadic and triadic interactions of infants in second semester – with their parents, in dyads, and with all three invited to participate as a trio. Twenty-eight families were recruited and the dyadic (mother-infant, father-infant) and triadic spontaneous interactions of infants with both parents (mother-father-infant) were video-recorded once a month from the 7th to the 12th month of the infants' life. *Playful Episodes (PEs)* were defined according to the expression of positive facial expressions of emotion, which had either a spontaneous narrative pattern (beginning, development, culmination and resolution), or were accompanied by expressive behavioural rituals, conventional patterns of vocalisation and gesture that were expressed once or repeatedly with slight variations in content and intensity. Quantitative analysis of PEs for the population provided evidence of the narrative patterns. Micro-analysis of individual PEs provided evidence of *similarities* between dyadic and triadic interactions of infants with their parents according to: a) *duration*; b) *the content and the positive emotional expressions of PEs;* and c) *the emotional frame of PEs*. Dyadic and triadic interactions *differed* in that the proportions of maternal, paternal and infant laughter were higher in triadic compared to dyadic engagements. The results of this study are discussed and interpreted in the frame of the theory of Innate Intersubjectivity, or sharing of states of mind with affective regulations of self-awareness in relations with others.

*Keywords:* positive emotions, infants, playfulness, fun, family, parent, triads, Intersubjectivity.

---

[6] PhD in Developmental Psychology, SOS Children's Villages, Athens. E-mail: semitem@gmail.com

**Introduction**

We set out to compare playfulness in mother-infant and father-infant dyads with that in triads of both parents with the infant, by analysing recordings of free, unstructured, happy and playful occasions in the home. Special attention was given to manifestations of intense positive affect or 'joy'. The estimation of the 'fun' experienced by the participants was at the core of our study. This focus on 'fun' gave rise to a qualitatively different way of viewing the interactants: they were identified not only as 'parent' and 'offspring', but were also given attributes such as 'co-player' and/or 'joker'. They were not just partners but *joking* partners (Reddy, 2008). We did not ask them to accomplish a specific 'task', in so far as just 'having fun' may not be considered as a task with a desired pragmatic outcome. Parents were simply asked to enjoy themselves and the enjoyment of their children, enacting their familiar ways of joking with each other. Research data from person-directed play provide evidence that infants, before their first birthday, attribute *psychological meaning* to the affectively regulated actions of their partners. This kind of early attribution of meaning is rooted in the emotions of interactional contexts with the others and in the first 'symbols' that are being produced through direct social contact between infants and familiar partners (Reddy, 1989, 1991). The acceptance by infants of person-directed play raises crucial issues concerning the early understanding of others' intentionality, the ability to discriminate between a serious and a non-serious intention – in short, the negotiable nature of interpersonal knowledge. We aimed at a description of how this 'negotiation' is being unfolded between three partners -two adults and an infant- in 'fun' contexts of playful interactions.

We investigated the playful activities, and recorded the positive emotions that are shared by the partners; feelings that are evoked by playful actions and that motivate

further playful interaction. We asked if these actions and emotions enhance or reduce our estimation of qualitative and quantitative differences between the dyadic and the triadic communication. What we specifically aimed at was a description and comparison of the ways mothers, fathers and infants have fun with each other, one-to-one or all 3 together, as a family. We made a detailed analysis of the context in which these positive emotions appeared: the sequences in which behaviours were performed and the expressive features of performance. We particularly investigated: i) the *emotional expressions* of the partners around playful interaction, ii) the *activities* of the playful partners - the kinds of games played, and iii) the organisation of "scenarios" of performance wherein the emotions flow, and the ways the emotions are being experienced by and communicated to each partner.

Age and sex differences and similarities in these indices of parent-infant playfulness were also investigated, but these will not be presented in this paper.

Our argument and the hypotheses of this study were based on the following four different – and potentially interrelated – aspects of the impulse to play.

**Playfulness: Its intrinsic inaccessibility**

Play researchers coming from a number of disciplines (Psychology, Ethology, Anthropology, History), with different research agendas, have proposed a variety of criteria for playful behaviour in children (Groos, 1901; Vygotsky, 1933; Beach, 1945; Meyer-Holzapfel, 1956; Callois, 1958, cited by Berlyne, 1969; Piaget, 1962). Their opinions have raised controversies, and so far no generally accepted definition of play is available. There is disagreement about what should be regarded as the essential characteristic of play, it is not clear how the various criteria of play are related to each

other, and it is undecided whether these criteria should count for playful behaviour exclusively or for other behaviours as well. As Csikszentmihalyi (1976) notes:

"...play has rarely been studied for its own sake, as a behavioural phenomenon with unique characteristics of its own, independently of what it reveals about phylogenetic, social, affective, or cognitive adaptation" (p.5).

Huizinga (1938) also expressed concern about the definitional problems of play, arguing that these problems exist because most approaches have not dealt with the questions "what is play itself?" or "what play means to the player?" Apparently the essence of play – the "fun"- is, by its nature, resistant to analysis and logical interpretation.

As Fagen (1981) eloquently puts it:

"The most irritating feature of play, however, is not the abyss, not perceptual incoherence as such, but rather that play taunts us with its inaccessibility. We feel that something is behind it all, but we do not know, or we have forgotten, how to see it." (p. 493).

Yet, don't we all 'know' play when we see it? Part of the problem for researchers addressing the nature of play may depend on their assumptions and methods of enquiry.

*Taking play seriously*

The criteria adopted to define play paradoxically assume a rather 'non-playful' attitude towards play. Thus, it is assumed that play *must* have biological significance, or it *must* serve some unfunny function or other. Consequently, play is defined by the functions that it serves, or by its assumed biological aims and benefits. In other words, play is considered as a general 'rehearsal' of the youth for essential and serious life activities, and different forms of play are commonly used to 'index' cognitive development, as a

diagnostic and therapeutic tool, as one behaviour in a neutral context that provides the means for studying and assessing other more obviously 'useful' behaviours. Researchers studying children's play have defined the function of play as 'enrichment' and 'facilitation' of social and cognitive development. Interestingly, their research has usually been performed in highly supervised situations (e.g. laboratories, nursery schools) where the irrational or immature aspects of playful behaviour are likely to be ruled out, and only 'good' or 'idealized' play occurs (Sutton-Smith and Kelly-Byrne, 1984, cited by Nakano, 1993).

What happens to play when its functions supposedly connected with youthfulness and immaturity have been served? Some writers admit that playfulness can be detected in adults, this playfulness being the 'inheritance' of play from childhood (Solnit, 1993) or that playfulness can be used as a crucial parental 'strategy' to support and facilitate the developing adaptation of the child (Moran, 1986).

*Must play be social?*

What is the social significance of playfulness? Most of the criteria accepted to define play (e.g. "intrinsic motivation", "domination by means rather than ends", "personal freedom from social constraints") define solo performances or experiences of the individual. They distinguish joyful players, joyful partners or co-players. Some writers argue that playfulness is an accessible *personal* trait, an *internal* multilevel structure, a *disposition* of personality, or a *personal* 'gift' that correlates with measures of creativity (Barnett and Kleiber, 1982, 1984; Barnett and Fiscella, 1985; Barnett, 1991; Glynn and Webster, 1992). We know, though, that playfulness is most present in our lives when it is *shared with others*. There is an abundance of research data from animals to indicate that play is an adaptive characteristic of social species, and that it presupposes a certain

level of social awareness and a co-player or a 'rival', even an imaginary one (Trevarthen, 1993a; Bekoff and Byers, 1998; Panksepp, 2005).

*What communicates playfulness?*

How do people 'read' other people's or their partners' playfulness? Which criteria are people using when they recognize and identify playfulness? Smith and Vollstedt (1985) attempted to answer this question, using five criteria commonly employed in play research -- intrinsic motivation, positive affect, nonliterality, flexibility and domination of means rather than ends. They asked adult subjects to apply these criteria to a videotape of nursery school children's behaviour, and their conclusion was that no single criterion identifies play with certainty, and that "...we recognize play as being enjoyable, flexible and most typically characterized by pretend...although any scientific definition should take account of developmental theories and need no just follow ordinary usage" (p. 1049).

Do we actually use such criteria to define, initiate or involve ourselves in playful everyday encounters? Do infants and their loving companions really need *'scientific'* definitions of play? The choice matters a great deal (Reddy and Trevarthen, 2004; Reddy, 2008): one can either be an observer from the sidelines, or a participant, active and emotional co-player. It seems that parents and infants choose the second way of being-with-one another. In fact, "most mothers are also 'friends' with their infants, as are their male partners... Human mothers are more like peer playmates in the way they treat their babies than are monkey or ape mothers, whose offspring will never have to go to school and receive formal instruction" (Trevarthen, 2003, p. 239).

## Reviewing playful interactions in the family

The previous studies of parent-infant play and attachment, *focusing mainly on dyadic play*, have shown that besides clear similarities between paternal and maternal behaviour, there are also differences – though these are considered as less important (Lamb, 1997a, cited by Frascarolo, Favez and Fivaz-Depeursinge, 2003). The differences, among others, concern the following. First, the amount of involvement and proportion of playful interaction with the infant; for example, fathers spend less time with their infant, but more time in play activities than in caregiving. Second, the play style and types of games mothers and fathers choose to play with their infants. It is reported that fathers play more physical or idiosyncratic games, use objects in more unconventional way, vocalise less and are often more intrusive than mothers (Weinraub and Frankel, 1977; Yogman, 1981; Belsky, Gilstrap and Rovine, 1984; Crawley and Sherrod, 1984; Parke and Tinsley, 1984; Power, 1985).

Where interaction in family triads has been the topic of research it offered the opportunity for constituent dyads to be studied over a range of variables; comparing, for example, sex differences in parent and infant behaviour (Smith and Danglish, 1977; Fagot and Hagan, 1991), the characteristics of maternal and paternal talk (Golinkoff and Ames, 1979; Stoneman and Brody, 1981), talk between mother, infant and sibling (Jones and Adamson, 1988; Barton and Tomasello, 1991), and the growing social understanding of family membership in second-born children (Dunn and Munn, 1985).

In studies where family-level dynamics are taken into consideration, similarities and differences between partners' behaviours have to be seen as part of a rather complex whole, a systems approach to the motives of a family. It has been shown that the direction of influences between family members are circular and indirect, since the

mother's role, and even more the father's role is contained within the marital relationship, and affected by its quality. Mothers (wives), fathers (husbands) and infants (sons and daughters) have been demonstrated to be sensitive recipients of influences that give form to family interactions from the beginning of the infants' first year of life (Belsky, 1981; Dickstein and Parke, 1988; Cox, Owen, Lewis and Henderson, 1989; McHale, 1995; McHale, Kuersten and Lauretti, 1996).

In triadic family interaction we may discover fundamental differences between its system dynamics and those of dyadic interaction. Studies aimed at comparing dyadic and triadic interaction have concluded that there are both qualitative and quantitative differences: (1) both fathers and mothers interact more with their infants when alone with them rather than when their partner is also present, (2) infants, too, are reported to be more active in the dyadic than in the triadic situation, and (3) the triad allows parents to interact with each other beside addressing their infant, and it has been found that one consequence can be that mothers let fathers have the leading role in the interaction with the infants (Lamb, 1976, 1977a, 1977b; Clarke-Stewart, 1978; Belsky, 1979)

**Infant playfulness in everyday interactions:**

**A glance at the Theory of Innate Intersubjectivity**

Trevarthen (1993a, 1993b) has argued that the infant is born with his or her own playful self. Young infants exhibit a natural ability for 'intersubjectivity' that is possible through an engagement of affects and attention: communicative behaviour in the first year, even in the first two months of life, can be truly mutual, intentional and motivational. An exclusive focus on attachment as the motive for explaining early communication has been proved insufficient (Reddy, Hay, Murray and Trevarthen, 1997). In short, there seems to be a motive for *companionship* evident in the first year of life. Happy parents

play with their infants from the very beginning. Play has nothing to do with protecting or regulating the infant as just a biological/physiological organism. Communication of motives and emotions, intentions, hopes and understanding is revealed in natural conversations and games of infants with people they know and like (Trevarthen and Bjørkvold, 2016, in press). Trevarthen (1993b) decribes a playful relationship as communication with a known companion, who is a curious, active and creative partner in cooperative consciousness. He also indicated that mothers often tease their infants to get laughter, and they may exchange habitual grimaces or gestures, making them into 'jokes' that are quickly recognized by their infants (Trevarthen, 1990).

Infants, highly attuned to the unexpected and attracted to the odd, "…easily grasp and delight in wordless dramas of the unexpected performed for them by adults, like peek-a-boo, and they do so before they have words enough to tell or understand stories" (Bruner, 2002, p.31)

As Reddy (1989, 1991, 2001, 2005, 2008) and Reddy and Williams (2000) have shown, infants, during the second semester of life, are provocative: they *initiate* 'teasing', 'showing off' and 'clowning' behaviour in order to get a laugh from their familiar partners. These early funny 'games' are purely social and emotional. They are *person directed* games, and their emotionality lies in the fact that they aim at the others' reactions and they take their form in response to others' reactions. Person-directed play, interpersonal games and interpersonal joking presuppose the presence of a partner or the active seeking of her and thus underline the essence of the social nature of play. There is evidence that the kinds of interpersonal play and joking in question can be observed from very early in human relationships between family members -- certainly they have been recorded to be initiated by 7 month olds to adults, and by adults to infants sometimes much earlier (Dunn, 1985, 1988; Schieffelin, 1986; Reddy, 1989, 1991,

2005, 2008; Semitekolou, 2003). They are most often found in relationships characterized by high intimacy and frequent contact (Alford, 1983), and they lead to new levels of mutual pleasure and generate feelings of union between the participants (Nakano, 1995).

Emotional acts need emotional perception and one cannot achieve this without emotional engagement. Emotions are the key to all kinds of psychological engagement: they are part of an agent in her active relationship with the world and they are intensely shared with sympathetic companions who enjoy that sharing and attribute meaning on it (Reddy and Trevarthen, 2004).

### The infant's experience of triadic communication

Playfulness in infancy has been investigated principally in dyadic interactions and only occasionally in triadic or polyadic ones. Thus, it fails to grasp what the unsophisticated infant mind is trying to be and do in normal circumstances. "And it is clearly not possible to appreciate natural sociability fully by looking only at individuals, or at dyads" (Trevarthen, 2003, p. 233). Are infants capable of distinguishing between dyadic and triadic interaction? Do they actively engage in triadic situations?

Selby and Bradley (2003) criticize a bias in past research, which has focussed on the mother-infant dyad and on emotional attachment to the mother for protection and care of the infant, whose dependence is, by implication, emphasized. They have directly challenged the idea that infants are dependent on adult support for communication in one-to-one encounters. They present proof that, from 6 months at least, an infant can negotiate an intersubjective, emotionally controlled engagement with 2 peers when no adult is present. Their observations of communication in infant triads led to the conclusion that infants manifest the characteristics of group communication or

'sociability' in the second six months of life. "By nine months of age, there is evidence for a 'clan' or 'group' mentality in infants, something quite different in form from the kind of 'shared dyadic programme' which is hypothesized... to underpin the growth of humans' sociability" (Bradley, 2009, p.267). Based on that evidence, Bradley (2009) refers to a "kind of collective dimension of infants' intersubjective being" (p. 277).

Tremblay-Leveau and Nadel (1995, 1996) conducted an experimental study of triads including an adult experimenter and two infants of the same age one of whom was purposely excluded from the interaction. The results of their study show that eleven-month-olds are aware of their social position in a triad, and they demonstrate meta-communicative skills as they strive to avoid being excluded, carefully observe their partners' focus of attention, using the 'data' of their observation to take part in the interaction. In other words, infants by the end of their first year of life seem to be skilled communicative partners not only in family triads, but in non-family triads as well.

The research on triadic communication in the family has also been constrained. Nevertheless, some have observed triadic communication between mother, father and infant, and found it emotionally rich and productive of playful events that benefit all parties, and apparently it supports the development of the child (Fivaz-Depeursinge and Corboz-Warnery, 1999; McHale and Fivaz-Depeursinge, 1999).

There is evidence that the notion that infants are adapted at first just for dyadic interactions may be misleading. Indeed, this belief may be an artefact of the dyadic settings habitually employed for observing the infant's interactions, and not due to a natural limitation in the infant's first social abilities. Fivaz-Depeursinge and Corboz-Warnery (1999) provided evidence that even three-month-old infants begin to join in triangular coordinations, sharing their attention and affects with both parents in triadic play. They suggest that the sophisticated triangulation strategies of nine-month-olds

may develop from the practice of communication in triangles from the beginning. Furthermore, they assume that "the triangular competence is an integral part of the person-directed motive" (p.115), that is a motive not to be confused with the object-directed motive and the development of the coordinated practice between person- and -object. As they state:

"…the ethological skills infants use in dialogue play may be adequate for trilogue play, right from the beginning…Therefore, there may not be a reason to make a special developmental provision for trilogue." (Fivaz-Depeursinge and Corboz-Warnery, 1999, p.25).

## Method

*Participants*

The research took place in Athens. Twenty-eight families took part in it (28 mothers, 28 fathers and 28 infants, N=84). Paediatricians and obstetricians helped in recruiting the participants of our research. All of the infants were first born. This choice was based on the two following reasons. First, during home visits, we were recording both dyadic and triadic interactions of parents and infants. Thus, we thought that the presence of a 'second' child would make the situation a bit complicated. Second, we wanted homogeneity as far as the parental experience was concerned.

Infants (15 girls, 13 boys) were videorecorded from the 7th until the 12th month. At the very beginning of the research infants were about to reach a new level of connecting with their beloved adult ones. Trevarthen (1993b; Trevarthen and Hubley, 1978) calls this new developmental level "secondary intersubjectivity", defined as coordinating and sharing with another person's attention, feelings and intentions toward

a third pole of an object, event, or action. Secondary intersubjectivity implies that the infant is aware of co-affectivity and co-agency with another person in relation to something else. Similarly, Stern (2000) proposes the emergence of the "intersubjective self" around 9 months of age in which the infant is thought to notice that others are affected by her agency just as she is affected by the agency of others. At the beginning of the research, the infants were 7 months-old (210 days, range: 208-214 days). Mothers' mean age was 32.6 years (range 27-38) and fathers' mean age was 37.5 (range 29-41).

*Procedure*

Using a video camera (Panasonic NV-MS4 SVHS HI-FI STEREO) we recorded 7 minutes of father-infant play, 7 minutes of mother-infant play and 7 minutes of mother-father-infant play (the total time of recording was approximately 20-25 minutes). Six visits were made to each family, once a month (a total of 168 visits). Thus, the total number of recordings for each type of the interactions were 168 dyadic between mothers and infants, 168 dyadic between fathers and infants (N=336) and 168 triadic. The total number of the recordings (both dyadic ones and triadic) were 504. Recordings were conducted in a room chosen by the parents.

The parents were given the following instruction: "Play your usual, favourite games with your baby" (dyadic situation) or/and "Play the way the three of you enjoy yourselves" (triadic situation). In each visit to each family the sequence of the recordings were counterbalanced according to the type of it, i.e. the first recording, in the first visit, started with the dyadic interaction between the mother and the infant, followed by the recording of the father-infant dyad and concluded with the recording of the triadic interaction, while at the second visit to the family we recorded the dyadic

interaction between the father and the infant first, then the dyad between the mother and the infant and finally the triadic interaction, and so on. We were not that strict at that point, though. Sometimes a father wished to take the initiative of playing first. Or sometimes, both parents wanted to start in the triadic situation. We let them do as they wished. From the total visits, the parents chose not to follow the counterbalancing sequence of the recordings 56 times.

*Coding*

Placing 'fun' at the core of our study, we first identified *person-directed* games: that is, games initiated by one person and directed to a partner to create an emotional effect on him or her, and to stimulate interest and delight in one another. The unit of analysis was therefore the *playful episode (PE)*. A playful episode was identified when the following three criteria were met:

a) *Structure of the Interaction*: There was a 'game', a thematic structure, with a narrative contour i.e. a beginning, a middle and an end; a behaviour or a set of behaviours that were performed once or repeatedly, sometimes with slight variations within the episode.

b) *Number of Involved Participants*: There was mutual engagement of at least 2 of the partners in playful activity: they were participating or co-acting in the same game. In the triadic condition, all three partners could be mutually engaged, or at least the two of them could play while the third either observed the dyadic game or attended elsewhere.

c) *Quality of Emotional Expressions*: The episode was in the context of having 'fun' i.e. the partners were happy, sharing a feeling of enjoyment. Thus, each episode included positive expressions (*interest, pleasure* or *joy*) rather than expressions of negative emotions. On the basis of this criterion, in the present paper, the operational

definition of emotional expressions of the interactants and the presentation of the findings will be restricted to positive emotions.

In dyadic and triadic interactions, both infants' and parents' positive emotional expressions (*interest, pleasure, joy*) were coded 10 seconds before PEs, during PEs, and 10 seconds after PEs.

*Interest* was defined as an emotion that generates a feeling of wanting to become involved, or to have new experiences with the person or object that has stimulated the interest (Izard, 1977, cited by Fredrickson and Branigan, 2001). It was coded according to partners' eye contact, gaze or orientation to one or other's face or body; the eyes of the partners were either wide-open or blinking, and the eyebrows were raised or 'knit' (Kokkinaki, 2003). Orientation or pointing behaviour to an object was also measured for coding *interest*, as well as parental verbal comments that initiate a game or invite a partner to join an activity, and vocalisations of the infant and of the parents.

*Pleasure* was coded when a happy, relaxed face expression was observed, with open, "smiley" eyes, gazing at the face or the body of the other partner, and an elongated mouth, slightly open or closed with a smile (Dickson, Walker and Fogel, 1997; Kokkinaki, 1998; Kugiumutzakis, Kokkinaki, Markodimitraki and Vitalaki, 2005) or with laughter. Vocalisations of the parents or of the infant and parental comments that verbally expressed the feeling of pleasure were also measured.

We defined *joy* as a more intense expression of the emotion of pleasure. It was coded when a happy, relaxed face was observed, accompanied by a prolonged, loud and hearty laughter (Ruch, 1993), loud and happy vocalisations, movements of hands and legs, with or without eye contact or gaze to the other partner's face or body.

Microanalyses of the defined parental and infant behaviours in PEs were conducted using a time-unit of one second. Cohen's Kappas for intrascorer reliability

ranged from k=0.75 to 0.88 (the mean value of k being 0.81), and for the interscorer reliabilities ranged from k=0, 65 to 0, 81 (the mean value of k being 0.72) (Semitekolou, 2003). The categories of behaviours and other measures taken from the videos are defined in the following Tables 1 (for both dyadic and triadic PEs) and 2 (for triadic PEs in particular). It has to be noted that from the total number of variables presented in Table 1, the results presented in this paper are only in relation to the type of game, the duration of the PE, the initiation of the playful activity, the laughter of the interactants, the emotions expressed and the timing of emotions. Variables presented in Table 2 are additional variables specific to Playful Episodes in whole triads.

### Statistical analysis

The one-way analysis of variance (ANOVA, Bonferroni test of significance) was used to test the duration of the PEs according to their type (dyadic between mothers and infants, dyadic between fathers and infants and triadic ones). The chi-square analysis was used to test the statistical significance of the differences in the frequencies of all the other qualitative/categorical variables of our study according to the type of the interaction (dyadic/triadic) and the laughter of the interactants. The significance level for the chi-square test was set at 5% (Cramer, 1998).

**Table 1**: Variables measured in both dyadic and triadic Playful Episodes (M=mother, F=father, I= infant)

| | |
|---|---|
| **Physical proximity** | How close or distant the partners are in space: <br> i) embraced or held *near*, at a distance closer than 1 meter; <br> ii) *far*, at a distance more than 1 meter |
| **Who initiated the playful activity** | The person who begins the game: M, F or I; M after F or F after M, e. g. F suggests M to tickle I, etc. |
| **Type of game** | i) *Non-toy, body or interpersonal games:* e.g. tossing in the air, tickling, chasing, peek-a-boo, playful obstruction of an infant's action, crawling, etc; <br> ii) *Toy games*: e.g. hide and seek, give and take with an object, animation of an object by the parent, conventional use of toys (play with a ball / a doll / a car) etc. |
| **Communicative behaviours** | Vocalisations, smile, laughter, gazes to other or to object of joint interest, touch (i.e. kissing, caressing, biting) |
| **Parental verbal comments** | Comments that: <br> i) *praise* (e.g. 'my pretty baby'); <br> ii) *tease* (e.g. 'my silly baby', 'you sucker..!'); <br> iii) *invite* (e.g. 'gimme', 'let's...'); <br> iv) *describe* (e.g. 'you like this game, huh?'); <br> v) *playfully threaten* (e.g.' I'll eat you.'). |
| **Partners' motion in space** | Fixed in position or moving in space: <br> e.g. both M and I in motion; M in motion, I stationary; <br> both  M and I stationary, F in motion, etc. |
| **Duration of the episode** | The duration (in seconds) of each PE |
| **Emotion expressed** | *Interest, Pleasure, Joy* by each partner. |
| **Timing of emotional expression** | i) 10 secs. *before* the beginning of the PE; <br> ii) *During* the PE; <br> iii) 10 secs. *after* the end of the PE. |

**Table 2***: Additional variables specific to triadic Playful Episodes (M=mother, F=father, I= infant)

| | |
|---|---|
| **Direction of parental verbal comments** | Who speaks to whom:<br> e.g. M to I, M to both F and I, F to M |
| **Types of engagement** | i) Triadic mutual engagement;<br>ii) Dyadic mutual engagement - the 'third' person *observes* the ongoing activity;<br>iii) Dyadic mutual engagement - the 'third' person *ignores*, i. e. does something else irrelevant to the ongoing activity. |
| **Intervention / Intrusion** | The 'third' person intervenes in the ongoing activity e.g. suggesting a new game, distracting I's attention by presenting a new toy. |
| **Result of intervention** | i) The dyad *ignores* the suggestion (keeps up with the ongoing activity);<br>ii) The dyad *follows* the suggestion (changes the thematic structure, the game of the PE). |

## Results

*Qualitative Analysis*

Unfolding playfulness in parent-infant interactions was fascinating. Let us present some vignettes of it. We will narrate four examples of triadic and one example of dyadic playful interaction in the PEs as observed in our sample.

*Example 1*

An eight-month-old girl and her parents are on the floor. She is absorbed in a toy and pays no attention to her parents. After two unsuccessful attempts to attract their daughter's attention, mother prompts father to use a toy; a "dog" puppet that can be animated by a hand inside it. Father, following the mother's suggestion, takes the toy

"dog" and moves his hand covered by the "dog", touching his daughter's face and belly as if to "bite" it. During his movement, mother makes a barking sound. Both mother and father smilingly look at their infant. She looks alternatively at her parents' faces and at the toy; having "bright" eyes, she smiles with a really cute and kind smile (like saying "O.K. I can see that you want me to play with you! And I'm accepting the invitation"). This is repeated three times and the game ends with a loud laugh from the mother, as an epilogue (Duration: 19 seconds).

*Example 2*

A ten-month-old boy sits proudly on his father's shoulders. Mother approaches father and son, laughing and saying: "Where are you? Now, I'm gonna get you and kiss you!" A chasing game starts. Father cradles his body round his son and turns to the left and to the right, saying in a provocative tone "You cannot, you cannot!" while mother jumps and lifts her hands to reach the boy, repeating the same words, as before. A couch that is between the chased (father and son) and the chaser (mother) makes the game even more challenging and exciting. The infant laughs loudly, and mother and father also laugh. This game ends when both mother (jumping around) and father (lifting his son) get tired! (Duration: 42 seconds).

*Example 3*

A ten-month-old girl and her mother are on the floor, embracing one another while father sits next to them. Father is about to leave the room; he starts crawling, saying: "Bye-Bye now…Dad is leaving". Suddenly, he turns back; and he comes close to the embracing dyad, using the upper part of his body in a playfully threatening way; in a changed voice, he says: "I'm gonna get you, I'm the bad wolf…I'm not gonna leave!"

Mother laughs and as soon as she pulls herself and her daughter away from father, the girl starts laughing too. This is repeated two more times. While father pretends that he is about to leave, the infant orients her gaze to her father's side and vocalises loudly; and the mother has a broad smile. While father comes back to 'get' them, both mother and infant pull back and laugh a lot. This game ends when father actually leaves the room, as he initially planned to do (Duration: 28 seconds).

*Example 4*

A nine–month-old boy - sitting on his mother's lap on a sofa- is looking at his father who is lying next to them pretending that he is sleeping. The mother is looking at the infant with an expression of pleasure (Photo Ia). After about 3 secs the father suddenly comes up towards the infant with an increasingly pleasure expression and this quick torso moving patter ends into tickling the infant for about 2 secs. The infant smiles and then laughs at him while the mother attends their dyadic playful interaction (Photo Ib). The father lies down again for a second round. The mother is looking at the father with a smiling face while the infant attends intensely to him and after a while he vocalizes in combination to stretching his hands (Photo Ic) as if calling and saying to him: "Come on, I am waiting for you to come up again!". After about 3 secs the father comes up suddenly with an ascending pleasure expression to tickle the infant's tummy again for about 1 second. The infant smiles and laughs at him while attempting to touch him with his right hand. The mother shares this dyadic game with an increasingly pleasure expression while looking both at the father and the infant (Photo Id). This playful pattern which was featured by a predictable torso moving patterns accompanied by a spontaneous narrative pattern (beginning, development, culmination and resolution) of

positive facial expressions of emotions was repeated for three more times (Duration:  26 seconds).



Photo Ia                                    Photo Ib

Photo Ic                                    Photo Id

Photo I: An example of a triadic Playful Episode between a nine-month-old-boy, his father and mother.

*Example 5*

An eleven-month-old boy starts crawling towards a plug in the socket. His mother approaches him, stands behind him and puts him in the middle of her open legs. As soon as he starts his crawling, she pulls his legs back to his initial position, away from the socket. While doing so, she laughs and in a changed voice, she says: "Where do you think you're going? …Come here!" The boy laughs every single time he is pulled in backwards, to his mother's side. This is repeated seven times (mother occasionally tickles her son's toes); the game ends when the infant stands still. (Duration: 36 sec).

*Quantitative analysis*

During the 168 home visits (504 total recordings), we have recorded *527* dyadic (father-infant, mother-infant) and triadic (mother-father-infant) PEs. Of these, *180 (34.2%)* were between mothers and infants, *51 (9.7%)* were between fathers and infants, and *296 (56.2%)* involved mothers, fathers and infants. The frequency of father-infant PEs was rather low comparing to these of the triadic PEs and the dyadic PEs between mothers and their infants. From the beginning of the research, 10 fathers expressed their shyness, telling us they would feel a bit embarrassed having themselves recorded. Interestingly, their awkwardness seemed to slip away during the triadic situation. This was not systematically investigated though and it will be discussed further as part of this study's limitations, at the end of the paper.

*How long did 'playfulness' last?*

The mean duration of *mother-infant PEs* was *32.05 sec* (range: 6-163, M=20 sec), of *father-infant PEs* was *30.56 sec* (range: 7-278, M=28 sec), and of the *triadic PEs* was *32.47 sec* (range: 6-203, M=30 sec). The Bonferroni test of significance indicated no significant differences between the duration of PEs in mother-infant and father-infant interactions (p=0.701), between the duration of PEs in mother-infant and triadic interactions (p=1.000), or between the duration of PEs in father-infant and triadic interactions (p=0.668).

*Who took the initiative for starting the 'game' more often?*

In mother-infant dyadic PEs (N=180), mothers initiated the playful activity in 170 cases (94.5%) while infants did so in 8 cases (4.4%). The cases in which, infants initiated a

game after their mothers' suggestion were just 2 (1.1%). The differences in these frequencies were found to be statistically significant ($\chi^2$=302.80, df=2, p=0.0005).

In father-infant PEs (N=51), fathers took the initiative in 43 cases (84.3%) and infants did so in 6 cases (11.8%). Infants followed paternal suggestion in starting a game in just two cases (3.9%) ($\chi^2$=60.11, df=2, p=0.0005).

In triadic PEs (N=296), mothers (N=129, 43.6%) and fathers (N=126, 42.6%) were also the main initiators of the playful activity. Fathers initiated a game after their wives' suggestion in 14 cases (4.7%), mothers initiated a game after their husbands' suggestion in 10 cases (3.4%), while infants initiated the game in rather very low frequencies, that found to be statistically significant ($\chi^2$=482.65, df=6, p=0.0005).

*What was the 'agenda' of the playful 'story'?*

From the total of 527 dyadic and triadic PEs, 389 of them (73.8%) of them were without toys or objects, while 138 (26.2%) included toys or objects. Particularly, in mother-infant dyadic PEs (N=180), the total number of non-toy games was 132 (73.3%) while that of toy-games was 48 (26.7%). In father-infant dyadic PEs (N=51), the total number of non-toy games was 32 (62.7%) while that of toy-games was 19 (37.3%). In triadic PEs (N=296), non-toy games were also observed more (N=225, 76%) than toy games (N=71, 24%) (See Figure 1). No significant differences were found in the proportions of 'toy' and 'non-toy' games in the different groups: mother-infant dyads, father-infant dyads and family triads ($\chi^2$=3.99, df =2, p=0.13).
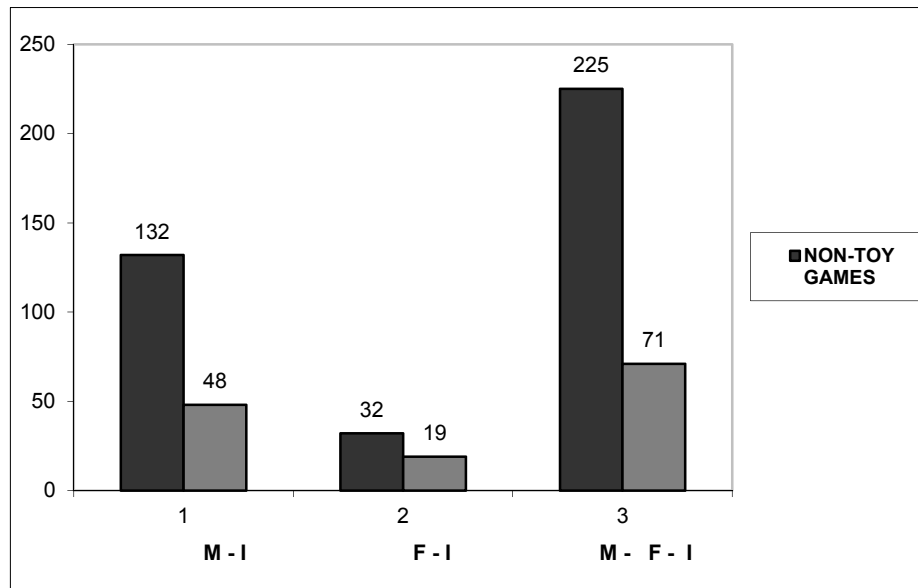
**Figure 1**: Frequencies of toy and non-toy games in dyadic and triadic PEs (M-I= mother-infant PEs, F-I= father-infant PEs, M-F-I= triadic PEs).

*What kind of games elicited more laughter from the partners?*

During the *dyadic PEs* between mothers and infants, the proportion of mothers' *laughter* was higher during 'non-toy' games (N=17) than during 'toy' games (N=3) ($\chi^2$=9.80, df=1, p=0.002). The proportion of infants' laughter was, also, significantly higher during 'non-toy' games (N=31) than during 'toy' games (N=4) ($\chi^2$=20.82, df=1, p=0.0005).

In *dyadic PEs* between fathers and infants, infants' laughter (N=10) occurred exclusively during 'non-toy' games. The frequency of fathers' laughter was very low (N=6) and not significantly different between 'toy' (N=2) and 'non-toy' games (N=4).

During the *triadic PEs,* the proportion of mothers' laughter was significantly higher during 'non-toy' games (N=51) than 'toy' games (N=20) ($\chi^2$=13.53, df=1, p=0.0005), and the same was true for infants' laughter ('non-toy' games, N=69; 'toy'

games, N=6) ($\chi^2$=52.92, df=1, p=0.0005) and fathers' laughter ('non-toy' games, N=44; 'toy' games, N=6) ($\chi^2$=28.88, df=1, p=0.0005).

*Did all three partners join in the triadic games?*

From the total 296 triadic PEs, fathers, mothers and infants were mutually engaged in the ongoing playful activities in 145 of them (49%). Mutual engagements in which mothers and infants were playing together while fathers were observing without actively taking part occurred less frequently (N=61, 20.6%), as did games in which fathers and infants were playing together while mothers were observing (N=54, 18.2%), i.e. having the same focus of attention, smiling, laughing, or verbally commenting on the playful activity. Other types of participation between parents and infants (e.g. when one parent and the infant were playing while the other parent was doing something irrelevant to the game) occurred in extremely low frequencies. These differences in the frequencies of participation in different game patterns were found to be significant ($\chi^2$=645.55, df=9, p=0.0005).

*Did the partners enjoy their triadic games?*

Significant differences were found in the proportions of laughter in the different groups: mother-infant dyads, father-infant dyads and family triads. The chi-square analysis indicated that the proportion of mothers' laughter was higher in triadic PEs (N=71) than in dyadic (mother-infant) ones (N=20) ($\chi^2$=28.58, df=1, p=0.0005). The proportion of fathers' laughter was also found to be significantly higher in triadic PEs (N=50) compared to the dyadic (father-infant) ones (N=6) ($\chi^2$=34.57, df=1, p=0.0005). Similarly, the proportion of infants' laughter was significantly higher in triadic PEs

(N=75) than in mother-infant PEs (N=35) and father-infant PEs (N=10) ($\chi^2$=53.75, df =2, p=0.0005).

*Positive emotional expressions that preceded, accompanied and followed dyadic and triadic Playful Episodes*

Striking similarities were found in the frequencies of the emotional expressions manifested by the partners *before, during,* and *after* the PEs, in both the dyadic and triadic groups. *Interest* was the most frequent emotion before the beginning of both the dyadic PEs and the triadic ones in all partners. *Pleasure and joy* were observed in increased frequencies during the dyadic and the triadic PEs in both parents and the infants. After the end of both the dyadic PEs and the triadic ones, the manifestations of the intense positive feelings of pleasure and joy are reduced in frequency, while the frequency in the manifestations of *interest* is increased again. The total frequencies of the positive emotional expressions of the partners are presented below in Figures 2-4:
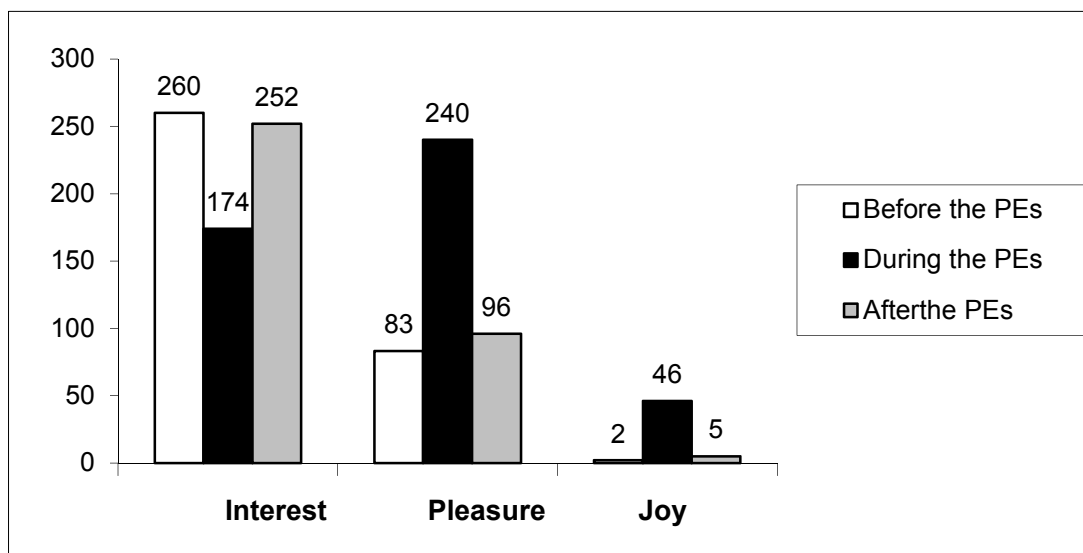


**Figure 2**: Total frequencies of emotional expressions in dyadic mother-infant PEs (for both partners).
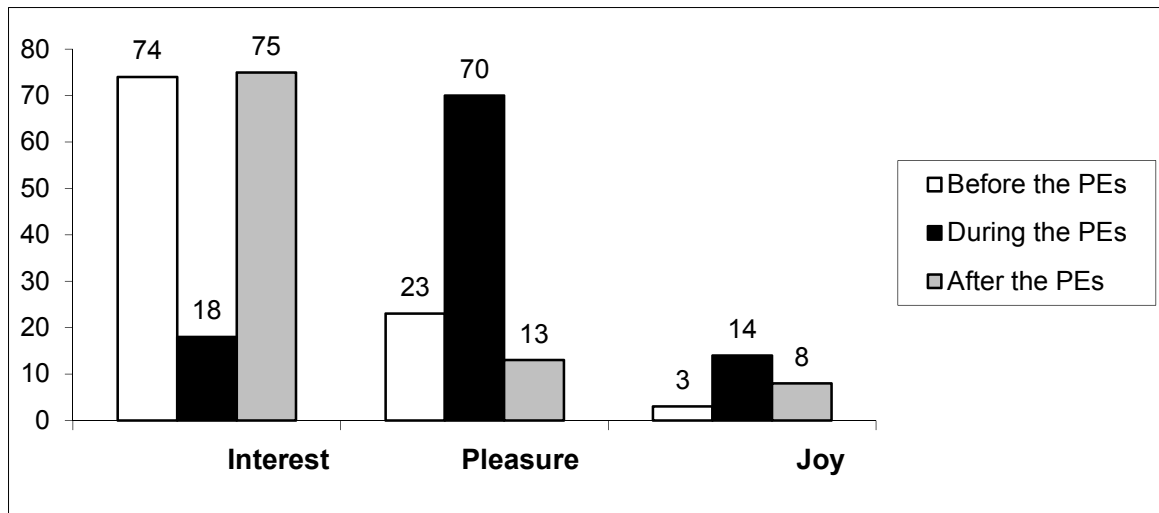
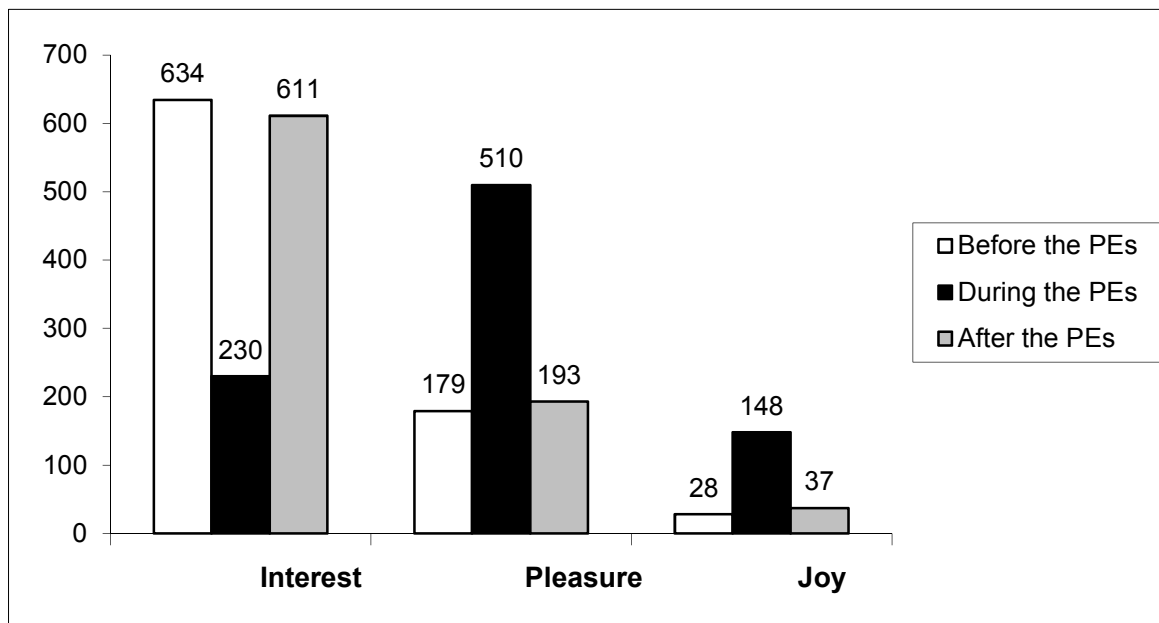**Figure 3**: Total frequencies of emotional expressions in dyadic father-infants PEs (for both partners).



**Figure 4**: Total frequencies of emotional expressions in triadic PEs (for all Partners).

## Discussion

The present study aimed to overcome the hitherto taunting inaccessibility of play to the researcher by focusing on *person-directed* play and the positive feelings (interest, pleasure, joy) that signal interpersonal playfulness. Observations of infants in the first year in *free play with mother, with father, or in a trio* seem to be what we need to understand the 'instinct' for creating friendships in meaning, sharing enjoyment of intentions, discoveries and humorous feelings of rivalry in affection.

Let us summarise the results of our study, attempting to find the underpinning thread that may connect them:

i) The mean duration of both the dyadic PEs and of the triadic ones was similar and approximately thirty seconds.

ii) The initiative of enacting a playful activity of a certain theme -a 'game'- was taken mostly by the parents, both in the dyadic PEs and in the triadic ones. More specifically, in the triadic PEs, mothers took the role of the initiator of the games as much as father did.

iii) The 'agenda' of both dyadic and triadic PEs was found to be similar. The partners in our sample preferred playing 'non-toy' games in both dyads and triads. Both mothers and fathers when alone with their infant played 'non-toy' or person-person games more often than 'toy' or person-person-object games. This was also the case in triadic play; the families preferred games where no object was involved.

iv) 'Non-toy' games elicited more laughter than 'toy' games, both in the dyadic PEs and in the triadic ones.

v) The triadic situation increased both the number of PEs and the emotional responsiveness of the interactants (namely their laughter which we took as the basic behavioural 'clue' for the detection of intense enjoyment). Triadic PEs were more numerous than dyadic ones between mothers and infants, and much more frequent than the dyadic ones between fathers and infants. All three partners' laughter proportion was higher in the triadic interactions than in the dyadic ones.

vi) In most of cases, all partners were taking part in the games, either by actively engaging in them or by being an attentive and responsive participant observer: sharing the state of each other's mind, resonating to the interaction and mirroring its affective tone.

vii) Striking similarities were found in the frequencies of the emotional expressions manifested by the partners *before, during,* and *after* the PEs, in both the dyadic and triadic groups. Before the beginning and after the end of dyadic and triadic PEs interest was the most common emotional expression while pleasure was expressed in low frequency. In the course of PEs pleasure remained the most common emotional expression while joy increased and interest decreased in frequency.

Approximately thirty seconds was found to be an adequate or an appropriate time for the partners to 'tell', or 'narrate' a coherent, funny and laughable 'story' (Bruner, 2002), that is to enact their dyadic and their triadic game and have fun without getting bored or tired of it. This, interestingly, is approximately the same time as the stanza of a typical baby song or ritualized action game played with an infant (Trevarthen, 1999).

Why were 'non-toy' games preferred over 'toy' games studying PEs with infants during the second semester, which is known to be a time when infants show more attention to objects (Trevarthen and Hubley, 1978; Trevarthen, 1994), and when parents

increasingly include objects in interactions with their infants? Why were 'non-toy' games more euphoric or more enjoyable in our recordings?

The answer may lie in what our subjects were asked to do, that is to play a game they usually enjoy. They were games initiated by a partner (mostly the parent) and directed to a partner (mostly the infant) to create an emotional effect on her. To provoke surprise (peek-a-boo), pleasure in motion (chasing), thrill or even vertigo (tossing in the air), playful teasing with infants' actions or intentions (infant crawling towards a place in the house and parent dragging him back), laughter itself (tickling, biting infant's belly). They were usually 'face-to-face' or even 'body-to-body' games: their action was not mediated by an object, the attention was not concentrated on an object, the affects were not initiated by and they did not derive from a shared, coordinated action upon an object. They were explicitly about action upon or with a person. This direct, face-to face contact between the co-players may be more exciting or more cheerful, thus more facilitating for the partners to 'have fun'.

We may not conclude from our observations on interpersonal play that toys and objects cannot be used to share feelings of excitement and cheerfulness. Infant initiated teasing games which include objects (e.g. violation of 'give and take' of an object) have been elegantly described (Reddy, 1989, 1991), providing evidence for infants' early capacities for pretence and their sympathy for other people's actions and emotionality. Maternal playful teasing of infants with the use of objects, and the infant's capacities for 'reading' their mother's play intention has also been studied (Trevarthen and Hubley, 1978; Hubley and Trevarthen, 1979; Nakano and Kanaya, 1993; Nakano, 1995). Examples of cheerful games with an object were also observed in our sample (e.g. playfully hitting / pushing the infant with an object, taking an object and teasingly

refusing to give it back), but these occurred in lower frequencies than 'non-object' games.

'Fun' contexts seem to involve the participation of all members of a triad. Indeed, it would be misleading to take the observational attitude of one member of the threesome as a 'non-participant'. It may be considered as the 'by-stander' position of one who observes the ongoing game and waits for the right moment to act or join in or even to take a leading role in a following game. Alternatively, it may be considered as an 'audience' position of one who watches loved family members enjoying themselves, and she or he may not want to interrupt while not being able to help smiling or laughing with them. In neither case it is the position of a person who has been excluded from the interaction, since exclusion from an enjoyable event is not a pleasant social position, nor would it be expressed with contented gazes, smiling face, laughter and positive comments.

*Interest,* the most frequent emotion before the beginning of the PEs - i.e. at the initiation of each episode's 'theme' - seems like an invitation or 'a license to joke' by which the partners communicate their willingness to enter into the 'other reality' of play. The increased frequencies of the partners' *pleasure and joy* during the PEs signify their mutual pleasure: the partners seem to 'declare' they are 'being-happy-with' their playmates. The sharing of 'fun' element is expressed in the sharing of *pleasure* and *joy,* in the well-coordinated, common or complementary movements of the partners, and in their unexpected inventions within a quasi 'elusive', but nevertheless co-experienced, intersubjective here and now. The manifestation of their intense positive feelings encourages the pursuit of their game. Soon after the end of a PE, the manifestations of the intense positive feelings of pleasure and joy are reduced in frequency, while the frequency in the manifestations of *Interest* is increased again: the partners are back to

ordinary reality, and they may 'chat' about their previous enjoyment, or they may warm up for their next game - which is about to become another PE.

Why does this emotional matching take place, or more specifically, 'where' does it take place? Freud (1908) argued that "the opposite of play is not what is serious but what is real" (p.144). A player takes his play very seriously, he distinguishes play from reality and he expends large amounts of emotion on it, not considering it an inferior experience! The 'entrance' of more than one player to this different – non-real – playful 'reality' where the 'as if' quality is on stage and where the actions are serious but at the same time they are not to be taken seriously, may require a kind of emotional matching between the playmates.

Can such an emotional interchange take place with a baby? There is conclusive evidence that very young infants, even new-borns, are capable of emotional communication and involvement with the emotions of their caretakers. They are 'gifted' with an innate motivational system that makes them capable of matching their behaviour and their emotions with those of others, and this matching enables them to actively seek an expressive, affectionate 'co-player' (mother or father) to play a cooperative, intersubjective game (Murray and Trevarthen, 1985, 1986; Kugiumutzakis, 1993, 1998; Kokkinaki, 1998; Kugiumutzakis, et al., 2005). The human brain development depends on the exercise of emotions of curiosity and hope for experience that makes sense, and also on its emotional responses to the sympathy of loving company, on being with people. There seems to be a progressive, developmental course *from love, to play, and then to work* (Trevarthen, 2016, in press): and, delightfully, what our research aimed at was describing joyful play with loving companions.

Can this kind of emotional interchange in cooperative awareness come about in triads? Hirshberg and Svedja (1990) and Hirshberg (1990) give evidence that twelve-month-olds resonate and socially refer to the emotional signals that are given to them by both of their parents at the same time; infants respond to the parental emotional signals even when these are conflicting (one parent giving happy signals while the other giving fearful signals) and thus creating a distressful condition and making them experience conflict. Fivaz-Depeursinge and Corboz-Warnery (1999) illustrated infants' triangular competence at nine months in negative as well as positive emotional contexts and went further on to show that three-month-olds develop triangular coordinations by sharing their attention and affects with both parents even under qualitative different -'difficult'- situations of communication - for example, a previously active parent presenting himself / herself to the infant with a still face.

Given this evidence, there is no reason why infants in the second semester of life would not respond to positive emotional signals given to them by their parents during a playful dyadic or triadic interaction, and furthermore that the infants would 'match' their emotions with those of their parents. The interactions in a threesome make it possible for a special kind of social referencing to take place, the 'object' of which is not a 'thing' but a 'subject' i.e. a person: each of the partners socially refer to the other in order to be emotionally 'informed', not only about the person addressed, but also about the so called 'third' party. We may deal with a phenomenon of mutual attention, where *three* organisms attend directly to each other's emotional performances and each experience the other's attention without another target or topic of attention *but* their partner-directed playful activity. As Reddy (2005, 2008) argues this may be the most direct *sharing* of attention and the most powerful experience of others' attention one can get. If a positively affected triadic playful interaction takes place, the game is even

more likely to prosper: a triangular or rather, a circular 'flowing' of positive affects will energize the playful activity.

Should we conclude that triadic playful interaction are the same as the better known dyadic ones and equally enjoyable? Or should we go further and suggest that a triadic playful interaction is likely to be more pleasurable than a dyadic one? The answer to the first question is negative: a triad is not two alternative dyads. The intrinsic dynamics of dyads and triads make them incomparable; they involve different social skills and triads offer interpersonal situations that cannot occur in dyads (Collis, 1982; Fivaz-Depeursinge and Corboz-Warnery, 1999; Frascarolo, Favez and Fivaz-Depeursinge, 2003).

It may be possible, however, to make an analogy and suggest that just as a triad is a whole beyond and above its parts, and qualitatively different from a dyad, the 'fun' element in any interaction - the mutual enjoyment of familiar and loving partners - may also be independent of the number of interactants. It may be the case that when people are engaged in intense positive affect it does not matter how many of them have been invited into the interaction. What matters is the fact that their agreed purpose is to play, and this is sufficient (Callois, 1958, cited by Berlyne, 1969). In either case 'fun' is the irreducible affective core (Huizinga, 1938). The players act together (as a twosome or as a threesome) building up their 'ways-of-being-with' (Stern, 2000) - the experience of 'being-*happy*-with' their playmates in a playful 'reality', where the required actions are to be funny and to laugh at one another. The game is a subjective experience simultaneously enjoyed by the three partners. Within this sharing, we may identify the special role that parents and infants assume in their funny games, i.e. the role of 'joker' or/and 'co-player' and exploiting the 'universal norm of reciprocity' which such a role offers. As Kennedy (1970) puts it, "what are proffered and returned... are rights of

play...the rights to invade the boundaries of the social ego or 'zone of intimacy' of specific individuals" (p.56).

The 'peak' moments of pleasure and joy in playfulness and person-directed joking may instantly transform the communicative incident: they reshape a triangle and for a moment they make it seem to function as or even 'feel' like a circle. For this transformation to be experienced, the actions that are being undertaken and the emotions that are shared by the actors appear to be more important as mediating factors than the number of interactants. The motive of being together in a playful 'reality' to experience 'fun' may, for that moment, round off the angles of the triangle, and so make room, perhaps, for even more persons to join in and assume their communicative role in a circle of play.

We may speak of *emotions as stories in company* with the time of being: play *requires* the enjoyment of companionship in imagination and creativity of movement. We are born with a moving body, ready to share its rhythms and melodies of joy. Humans have a biological capacity for *moving with feelings:* we share this capacity with other animals; the sharing of joy in social games is for life of a community of any highly sociable animal (Trevarthen and Panksepp, 2016, in press). Or, we may also speak, with Stern, of "now moments", a closer examination of which suggests the sharing of an "affect voyage" between two partners. "This voyage is the joint experiencing of an emotional 'micro-narrative' that unfolds in several seconds. It is physically lived through participating in the other's experience; it is a directly lived form of intersubjectivity" (Stern, 2002, p. 85). We argue that these "now moments" and their emotional, cheerful 'micro-narrative' can be shared between three partners as well; it only takes three voyagers, with their joy being the ticket for this voyage.

Music may be defined as the innate ability to make and hear sounds of the human body moving in communicable ways (Trevarthen, 2016, in press). Parents and children, while joyfully playing in everyday encounters, 'swing' together in common rhythms: it is a musical-emotional interplay. "For the human mind works holistically with the whole body, in *synaesthesias*, bringing all the different modes of sensory impression into *moments of living"* (Trevarthen and Bjørkvold, 2016, in press).

Reddy (1999) extends Nadel and Camaioni's (1993) 'orchestra' metaphor for the description of communication. She offers the metaphor of a 'jazz group', in which there is no individual performer but a dynamic collaboration, and there is no predetermined score - the music is inseparable from the process of playing. If we adopt the 'jazz group' metaphor for describing the playful communication, we could say that the 'fun' is the music that the group is producing; a music that will become high in 'expression' and 'allegro' in tempo, and that has richer sound when the group includes three 'musicians' than two, thus providing a more interesting or pleasurable 'musical' experience.

'Fun' seen as music, or more generally as a rhythmic engagement, raises issues that need to be addressed and from which we could learn much. These issues could be studied according to the modalities used for expressing this unique rhythm as well as for perceiving it; their development in infants, and the ways (or metaphorically the *'dancing steps'*) joking partners - infants and adults - use to communicate them (or 'dance' them) to each other. A range of studies demonstrate an important aspect of animate movement: its expressive character. Simple kinetic structures of observed movements give rise in an uninvolved observer to definite causality, animacy and even impressions of affect, impressions which are typically associated with higher-level cognitive processing. We can 'see' the meaning of another's action rather than attributing it to a 'table of stimuli': what we are really dealing with are primitive

phenomena which arise from the perceptual field itself (Heider and Simmel, 1944; Michotte, 1950, cited by Thines et al., 1991; Rime et al., 1985; Scholl and Tremoulet, 2000). Is it possible, then, that playful behaviour is linked with expressive movements of specific spatio-temporal forms, the playful-teasing quality of which are spontaneously initiated or/and directly perceived as such? A study on this question and its developmental aspects would be of great interest.

The study presented in this paper is a rather *raw* description of everyday joyful encounters of the family during the first year of the infant. We need to conduct more naturalistic studies, with more subjects recorded for longer periods in longitudinal designs. Longer warm up periods may also be of special importance in order to get the subjects (especially the fathers - as our study has indicated) acquainted with the procedure, to reduce the camera effect on their spontaneity and to give the naturalistic studies a desired ecological validity. A more systematic way of analyzing the *subtle* 'nature' of playful interactions at home is required, and for this purpose we need to code indices of emotions other than facial expressions, using more specific and adaptable coding systems (see Oster, 2005). We hope that this work will encourage a intensive study of playfulness during infancy, both in dyadic and in triadic contexts, in order to understand more the nature and life course of our playful species.

her useful advice on the very first version of this article and we thank her for that. We also deeply thank Theano Kokkinaki, University of Crete, for her trust and her feedback. Above all, the author would like to thank the infants and their families for offering their co-operation and sharing with her their joyful times.

## References

Alford, F. K. (1983). Privileged play: Joking relationships between parents and children. In F. E. Manning (Ed.), *The World of Play* (pp. 174-189). New York: Leisure Press.

Barnett, A. L., & Kleiber, A. D. (1984). Playfulness and the early play environment. *The Journal of Genetic Psychology, 144,* 153-164.

Barnett, A. L., & Fiscella, J. (1985). A child by any other name…A comparison of the playfulness of gifted and nongifted children. *Gifted Child Quarterly, 29(2),* 61-66.

Barnett, A. L. (1991). Characterizing playfulness: Correlates with individual attributes and personality traits. *Play and Culture, 4*, 371-393.

Barton, M. E., & Tomasello, M. (1991). Joint attention and conversation in mother-infant-sibling triads. *Child Development, 62,* 517-529.

Bekoff, M., & Byers, J. A.  (1998). *Animal Play: Evolutionary, Comparative and Ecological Approaches*.  New York: Cambridge University Press.

Belsky, J. (1979). Mother-father-infant interaction: A naturalistic observational study. *Developmental Psychology, 15(6),* 601-607.

Belsky, J. (1981). Early human experience: A family perspective. *Developmental Psychology, 17(1),* 3-23.

Belsky, J., Gilstrap, B., & Rovine, M. (1984). The Pennsylvania Infant and Family Development Project, I: Stability and change in mother-infant and father-infant interaction in a family setting at one, three, and nine months. *Child Development, 55,* 692-705.

Berlyne, D. E. (1969). Laughter, humor and play. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology (Vol.3, 2nd Ed.)* (pp. 795-852). Reading, MA: Addison-Wesley.

Bradley, S. B. (2009). Early Trios: Patterns of sound and movement in the genesis of meaning between infants. In S. Malloch & C. Trevarthen (Eds.), *Communicative Musicality: Exploring the Basis of Human Companionship* (pp. 263-280). Oxford: Oxford University Press.

Bruner, J. (2002). *Making Stories: Law, Literature, Life.* Cambridge MA: Harvard University Press.

Csikszentmihalyi, M. (1976). What play says about behaviour. *The Ontario Psychologist, 8(2),* 5-11.

Clarke-Stewart, K. A. (1978). And daddy makes three: The father's impact on mother and young child. *Child Development, 49,* 466-478.

Collis, G. M. (1982). Beyond dyadic interaction. *Bulletin of the British Psychological Society, 35,* A87.

Cox, M. J., Owen, M., Lewis, J. M., & Henderson, V. K. (1989). Marriage, adult adjustment, and early parenting. *Child Development, 60,* 1015-1024.

Cramer, D. (1998). *Fundamental Statistics for Social Research.* London: Routledge.

Crawley, S. B., & Sherrod, K. B. (1984). Parent-infant play during the first year of life. *Infant Behaviour and Development, 7,* 65-75.

Dickson, K. L., Walker, H., & Fogel, A. (1997). The relationship between smile type and play type during parent-infant play. *Developmental Psychology, 33 (6),* 925-933.

Dickstein, S., & Parke, R. D. (1988). Social referencing in infancy: A glance at fathers and marriage. *Child Development, 59,* 506-511.

Dunn, J., & Munn, P. (1985). Becoming a family member: Family conflict and the development of social understanding in the second year. *Child Development, 56,* 480-492.

Dunn, J. (1988). *The Beginnings of Social Understanding.* Cambridge MA: Harvard University Press.

Fagen, R. (1981). *Animal Play Behaviour.* London and New York: Oxford University Press.

Fagot, B. I., & Hagan, R. (1991). Observations of parent reactions to sex-stereotyped behaviours: Age and sex effects. *Child Development, 62,* 617-628.

Fivaz-Depeursinge, E., & Corboz-Warnery, A. (1999). *The Primary Triangle. A Developmental Systems View of Fathers, Mothers, and Infants.* New York: Basic Books.

Frascarolo, F., Favez, N., & Fivaz – Depeursinge, E. (2003). Fathers' and mothers' performances in father-mother-baby games. *European Journal of Psychology of Education, XVIII (2),* 101-111.

Fredrickson, B. L., & Branigan, C. (2001). Positive emotions. In T. J. Mayne & G. A. Bonanno (Eds.), *Emotions: Current Issues and Future Directions* (pp. 123-151). New York: Guildford.

Freud, S. (1908/1968). Creative writers and day-dreaming. In J. Strachey (Ed. and Trans.), *The Standard Edition of the Complete Psychological Works of Sigmund Freud.* (Vol. IX) (pp. 143-153). London: Hogarth Press.

Glynn, M., & Webster, J. (1992). The Adult Playfulness Scale: An initial assessment. *Psychological Reports, 71,* 83-103.

Golinkoff, R. M., & Ames, G. J. (1979). A comparison of fathers' and mothers' speech to their young children. *Child Development, 50,* 28-32.

Groos, K. (1901/1976). The play of Man: Teasing and love-play. In J. S. Bruner, A. Jolly & K. Sylva (Eds.), *Play: Its Role in Development and Evolution* (pp. 244-261). Harmondsworth, U.K.: Penguin.

Heider, F., & Simmel, M. (1944). An Experimental Study of Apparent Behaviour. *American Journal of Psychology*, *57*, 243-257.

Hirshberg, L.M., & Svejda, M. (1990). When infants look to their parents: I. Infants' social referencing of mothers compared to fathers. *Child Development, 61,* 1175-1186.

Hirshberg, L. M. (1990). When infants look to their parents: II. Twelve-month-olds' response to conflicting parental emotional signals. *Child Development, 61*, 1187-1191.

Hubley, P., & Trevarthen C. (1979) Sharing a task in infancy. In I. Uzgiris (Ed.), *Social Interaction During Infancy: New Directions for Child Development, Vol. 4* (pp. 57-80). San Francisco: Jossey-Bass.

Huizinga, J. (1938/1989). *O Anthropos kai to Paixnidi (Homo Ludens) [The Man and Play (Homo Ludens)]*. Athens: Gnosi Publications.

Jones, C. P., & Adamson, L. B. (1987). Language used in mother-child and mother-child-sibling interactions. *Child Development, 58,* 356-366.

Kennedy, G. J. (1970). Bonds of laughter among the Tarahumara indians: Toward a rethinking of joking relationship theory. In W. Goldschmidt & H. Hoijer (Eds.), *The Social Anthropology of Latin America: essays in honor of Ralph Leon Beals* (pp. 36-68). Berkeley: University of California, Latin American Studies Center.

Kokkinaki, T. (1998). *Emotion and Imitation in Early Infant-Parent Interaction: A Longitudinal and Cross-Cultural Study.* Ph.D. Thesis, University of Edinburgh.

Kokkinaki, T. (2003). A longitudinal, naturalistic and cross-cultural study on emotions in early infant-parent imitative interactions, *British Journal of Psychological Society, 21,* 243-258.

Kugiumutzakis, G. (1993). Intersubjective vocal imitation in early mother-infant interaction. In J. Nadel & L. Camaioni (Eds.), *New Perspective in Early Communication Development* (pp. 23-47). London: Routledge.

Kugiumutzakis, G. (1998). Neonatal imitation in the intersubjective companion space. In S. Bråten (Ed.), *Intersubjective Communication and Emotion in Early Ontogeny* (pp. 63-88). Cambridge*:* Cambridge University Press.

Kugiumutzakis, G., Kokkinaki, T., Markodimitraki, M., & Vitalaki, E. (2005). Emotions in early mimesis. In J. Nadel & D. Muir (Eds.), *Emotional Development: Recent Research Advances* (pp. 161-182). Oxford*:* Oxford University Press.

Lamb, M. E. (1976). Twelve-month-olds and their parents: Interaction in a laboratory playroom. *Developmental Psychology, 12(3),* 245-249.

Lamb, M. E. (1977a). Father-infant and mother-infant interaction in the first year of life. *Child Development, 48,* 167-181.

Lamb, M. E. (1977b). The development of mother-infant and father-infant attachments in the second year of life. *Developmental Psychology, 13(6),* 637-648.

McHale, J. P. (1995). Co-parenting and triadic interactions during infancy: The roles of marital distress and child gender. *Developmental Psychology, 31(6),* 985-996.

McHale, J. P., Kuersten, R., & Lauretti, A. (1996). New directions in the study of family-level dynamics during infancy and early childhood. In J. P. McHale & P. A. Cowan (Eds.), *New Directions for Child Development, 74. Understanding howfamily level dynamics affect children's development: Studies of two-parent families* (pp. 5-26). San Francisco: Jossey-Bass.

McHale, J. P., & Fivaz-Depeursinge, E. (1999). Understanding triadic and family group interactions during infancy and toddlerhood. *Clinical Child and Family Psychology Review, 2 (2), 107-127.*

Moran, S. G. (1986). Some functions of play and playfulness. A developmental perspective. Paper presented at the *International Conference on "A Psychoanalytic View of Play and Trauma", at Hebrew University, Jerusalem, March, 1986.*

Murray, L., & Trevarthen, C. (1985). Emotional regulation of interactions between two-month-olds and their mothers. In T. M. Field & N. Fox (Eds.), *Social Perception in Infants* (pp. 177-197). Norwood: N.J. Albex.

Murray, L., & Trevarthen, C. (1986). The infant's role in mother-infant communication. *Journal of Child Language, 13,* 15-29.

Nadel, J., & Camaioni, L. (1993). *New Perspectives in Early Communicative Development*. London: Routledge.

Nakano, S., and Kanaya, Y. (1993). The effects of mother's teasing: Do Japanese infants read their mothers' play intention in teasing? *Early Development and Parenting, 2(1),* 7-17.

Nakano, S. (1995). Incidents make communication: Teasing nurtures mindreading by perturbing interaction playfully. Paper presented at the *IV European Congress of Psychology, July 2-7, Athens.*

Oster, H. (2005). The repertoire of infant facial expressions: an ontogenetic perspective. In J. Nadel & D. Muir (Eds.), *Emotional Development* (pp. 261-292). Oxford: Oxford University Press.

Panksepp, J. (2005). Beyond a joke: From animal laughter to human joy? *Science, 308,* 62–63.

Parke, R. D., & Tinsley, B. R. (1984). Fatherhood: Historical and contemporary perspectives. In McCluskey, A. K., and Reese, W. H. (eds.), *Life-Span Developmental Psychology. Historical and Generational Effects* (pp. 203-248). New York: Academic Press, INC.

Piaget, J. (1962). *Play, Dreams and Imitation in Childhood.* London: Routledge and Kegan Paul.

Power, T. G. (1985). Mother- and father-infant play: A developmental analysis. *Child Development, 56,* 1514-1524.

Reddy, V. (1989). Teasing in infancy: Doing what they "shouldn't" be doing? *Paper adapted from a talk of the same title given at the BPS Developmental Psychology Section Conference, University of Surrey, September 8-11, 1989.*

Reddy, V. (1991). Playing with others' expectations: teasing and mucking about in the first year. In A. Whiten (Ed.), *Natural Theories of Mind* (pp. 143-158). Oxford: Blackwell.

Reddy, V., Hay, D., Murray, L., & Trevarthen, C. (1997). Communication in infancy: Mutual regulation of affect and attention. In G. Bremner, A. Slater & G. Butterworth (Eds.), *Infant Development Recent Advances* (pp. 247-273)*. Hillsdale, NJ: Erlbaum.

Reddy, V. (1999). Prelinguistic communication. In M. Barrett (Ed.), *The Development of Language* (pp. 25-50)*. Hovey: Psychology Press.

Reddy, V. (2001). Infant clowns: the interpersonal creation of humour in infancy. *Enfance, 3,* 247-256.

Reddy, V. (2005). Before the 'Third Element': Understanding attention to self. In N. Elian, C. Hoerl, J. Roessler & T. Mc Cormack (Eds.), *Joint Attention: Perspectives from Philosophy and Psychology* (pp. 85-109). Oxford: Clarendon Press.

Reddy, V., & Williams, E. (2000). The positive functions of teasing. Paper presented at *the Annual Conference of the Developmental Section of the British Psychological Society at Bristol, U.K., September 2000.*

Reddy, V., & Trevarthen, C. (2004). What we learn about babies from engaging with their emotions. *Zero to Three, 24(3),* 9-15.

Reddy, V. (2008). *How Infants Know Minds.* Cambridge, MA: Harvard University Press.

Rime, B., Boulanger, B., Laubin, P., Richir, M., & Stroobants, K. (1985). The perception of interpersonal emotions originated by patterns of movement. *Motivation and Emotion, 9 (3),* 241-260.

Ruch, W. (1993). Exhilaration and humor. In M. Lewis & J. M. Haviland (Eds.), *Handbook of Emotions* (pp. 605-616)*. New York, N.Y.: Guildford.

Schieffelin, B. B. (1986). Teasing and shaming in Kaluli children's interactions. In B. B. Schieffelin & E. Ochs (Eds.), *Language Socialization Across Cultures* (pp. 165-181). New York: Cambridge University Press.

Scholl, B. J., & Tremoulet, P. D. (2000). Perceptual causality and animacy. *Trends in Cognitive Sciences, 4(8),* 299-309.

Selby, J. M., & Bradley, B. S. (2003). Infants in groups: A paradigm for the study of early social experience. *Human Development, 46,* 197-221.

Semitekolou, M. (2003). *I Anaptixi ton Diadikon kai ton Triadikon Paigniodon Allilepidraseon Metaxi Goneon kai Vrefon kata ton Proto Vrefiko Hrono (The Development of Dyadic and Triadic Playful Interactions between Parents and Infants during the First Year).* PhD Thesis, Department of Philosophy and Social Studies, University of Crete, Greece.

Smith, P. K., & Danglish, L. (1977). Sex differences in parent and infant behavior in the home. *Child Development, 48,* 1250-1254.

Smith, P. K., & Vollstedt, R. (1985). On defining play: An empirical study of the relationship between play and various play criteria. *Child Development, 56,* 1042-1056.

Solnit, J. A. (1993). From play to playfulness in children and adults. In A. J. Solnit, D. J. Cohen & P. B. Neubauer (Eds.), *The Many Meanings of Play: A Psychoanalytic Perspective* (pp. 29-43). New Haven, CT: Yale University Press.

Stern, D. N. (2000). The *Interpersonal World of the Infant: A View from Psychoanalysis and Development Psychology* (Second Edition). New York: Basic Books.

Stern, D. N. (2002). Sharing affect voyages: A key element in psychotherapeutic change. *Abstract of a talk given at the symposium titled 'We Share, Therefore We Are: On Human Development, Education and Culture' (in honour of Prof. J. S. Bruner).* University of Crete, Crete, 21-22 October, 2002.

Stoneman, Z., & Brody, G. H. (1981). Two's company, three makes a difference: An examination of mothers' and fathers' speech to their young children. *Child Development, 52,* 705-707.

Thines, G., Costall, A., & Butterworth, G. (1991). *Michotte's Experimental Phenomenology of Perception.* Hillsdale, NJ: Lawrence Erlbaum Association.

Tremblay-Leveau, H., & Nadel, J. (1995). Young children's communication skills in triads. *International Journal of Behavioral Development, 18(2),* 227-242.

Tremblay-Leveau, H., & Nadel, J. (1996). Exclusion in triads: Can it serve 'meta-communicative' knowledge in 11- and 23-month-old children? *British Journal of Developmental Psychology, 14,* 145-158.

Trevarthen, C., & Hubley, P. (1978). Secondary Intersubjectivity: Confidence, confiding and acts of meaning in the first year. In A. Lock (Ed.), *Action, Gesture and Symbol: The Emergence of Language* (pp. 183-229). London: Academic Press.

Trevarthen, C. (1990). Signs before speech. In Sebeok, T. A., and Umiker-Sebeok, J. (eds.), *The Semiotic Web,* . New York: Mouton de Gruyter, 689-755.

Trevarthen, C. (1993a). The self born in intersubjectivity: The psychology of an infant communicating. In U. Neisser (Ed.), *The perceived self: ecological and interpersonal sources of the self-knowledge* (pp. 121-173). New York: Cambridge University Press.

Trevarthen, C. (1993b). Playing into reality: Conversations with the infant communicator. *Winnicott Studies, 7, Spring, 1993* (pp. 67-84). London: Karnak Books.

Trevarthen, C. (1994). Infant semiosis. In W. Noth (Ed.), *Origins of Semiosis. Sign Evolution in Nature and Culture* (pp. 219-252). Berlin & New York: Mouton de Gruyter.

Trevarthen, C. (1999). Musicality and the Intrinsic Motive Pulse: Evidence from human psychobiology and infant communication. *Musicae Scientiae: Rhythms, musical narrative, and the origins of human communication,* Special Issue 1999-2000, pp. 157-213. Liège: European Society for the Cognitive Sciences of Music.

Trevarthen, C. (2003). Infant psychology is an evolving culture. *Human Development, 46*, 197-221.

Trevarthen, C. & Panksepp, J. (2016, in press). In tune with feeling: Musical play with emotions of creativity, inspiring neuroaffective development and self-confidence for learning in company**.** In S. Hart (Ed.), *Inclusion, Play and Empathy: Neuroaffective Development in Children's Groups.* London: Jessica Kingsley.

Trevarthen, C., & Bjorkvold, J. R. (2016, in press). Chapter 2. Life for learning: How a young child seeks joy with companions in a meaningful world. In D. Narvaez, J. Braungart-Rieker, L. Miller, L. Gettler, & P. Hastings (Eds.), *Contexts for Young Child Flourishing: Evolution, Family and Society.* New York, NY: Oxford University Press.

Trevarthen, C. (2016, in press). Sharing joyful friendship and imagination for meaning with infants, and their application in early intervention. In S. Aquarone (Ed.), *Surviving the Early Years: From At-Risk to Mainstream.* London: Jessica Kingsley.

Vygotsky, L.S. (1933 / 1978). The role of play in development. In M. Cole, V. John-Steiner, S. Scribner & E. Souberman (Eds.), *Mind in Society: The Development of Higher Psychological Processes* (pp. 92-104). Cambridge, Mass.: Harvard University Press.

Weinraub, M., & Frankel, J. (1977). Sex differences in parent infant interaction during free play, departure, and separation. *Child Development, 48,* 1240-1249.

Yogman, W. M. (1981). Games fathers and mothers play with their infants. *International Mental Health Journal, 2(4),* 241-248.

# *'Όταν οι τρεις δεν αποτελούν πλήθος':*

## *Μετρώντας το μοίρασμα της διασκέδασης στις παιγνιώδεις*

## *αλληλεπιδράσεις μεταξύ γονέων και βρεφών*

### *Μαριαλένα Σεμιτέκολου*

**Περίληψη**

Σκοπός της παρούσας έρευνας ήταν να καθοριστούν οι τρόποι με τους οποίους χτίζονται και ενδυναμώνονται οι ιδιαίτερες σχέσεις της οικειότητας και της φιλίας μεταξύ των γονέων και των βρεφών, αλλά και το πώς το στοιχείο της ευθυμίας και της διασκέδασης ισχυροποιεί και προάγει τους δεσμούς της τριαδικής σχέσης. Για το σκοπό αυτό, καταγράψαμε τα συναισθήματα του ενδιαφέροντος και της ευχαρίστησης στις αυθόρμητες δυαδικές και τριαδικές αλληλεπιδράσεις των μητέρων, των πατέρων και των βρεφών τους κατά τη διάρκεια του δεύτερου εξαμήνου της ζωής του βρέφους. Βιντεοσκοπήσαμε τις αυθόρμητες παιγνιώδεις αλληλεπιδράσεις 28 οικογενειών σε δυάδες (μητέρες-βρέφη, πατέρες-βρέφη) και σε τριάδες (μητέρες-πατέρες-βρέφη) σε διαστήματα 30 ημερών από τον 7ο έως τον 12ο μήνα της ζωής του βρέφους. Τα παιγνιώδη επεισόδια (ΠΕ) ορίστηκαν με κριτήριο τις θετικές συναισθηματικές εκφράσεις προσώπου των συντρόφων οι οποίες είτε παρουσίαζαν ένα αφηγηματικό σχήμα (με αρχή, ανάπτυξη, κορύφωση και λύση) είτε συνόδευαν τυπικές παιγνιώδεις πρακτικές των συντρόφων (με συμπεριφορές που γίνονταν μία φορά ή που επαναλαμβάνονταν με ελαφρές τροποποιήσεις στο περιεχόμενο ή/και στην ένταση). Η ποσοτική ανάλυση των καταγεγραμμένων αλληλεπιδράσεων έδειξε ότι τα ΠΕ διακρίνονταν από μια αφηγηματική δομή. Επιπλέον, η μικροανάλυση των ΠΕ κατέδειξε *ομοιότητες* στις δυαδικές και στις τριαδικές αλληλεπιδράσεις των  βρεφών με τους γονείς τους ως προς: α) τη διάρκεια, β) το περιεχόμενο των ΠΕ, και γ) τις θετικές συναισθηματικές εκφράσεις των συντρόφων κατά τη διάρκεια των ΠΕ, και δ) το συναισθηματικό πλαίσιο των ΠΕ: πριν την αρχή και μετά το τέλος των δυαδικών και των τριαδικών ΠΕ, το συναίσθημα του ενδιαφέροντος ήταν αυτό που επικράτησε σε συχνότητα, ενώ η ευχαρίστηση καταγράφηκε σε χαμηλότερες συχνότητες. Κατά τη διάρκεια των ΠΕ, η ευχαρίστηση ήταν το συναίσθημα που εκφράστηκε συχνότερα από τους συντρόφους, ενώ το πιο έντονο συναίσθημα της χαράς αυξήθηκε και το ενδιαφέρον μειώθηκε σε συχνότητα. Ωστόσο, οι δυαδικές και οι τριαδικές αλληλεπιδράσεις παρουσίασαν μια ουσιαστική *διαφορά* αναφορικά με τη συχνότητα του γέλιου των μητέρων, των πατέρων και των βρεφών: κατά τη διάρκεια των τριαδικών ΠΕ, και οι τρεις σύντροφοι γέλασαν περισσότερο από ό,τι στη διάρκεια

των δυαδικών ΠΕ. Τα αποτελέσματα της παρούσας μελέτης συζητούνται και ερμηνεύονται υπό το πρίσμα της θεωρίας της Έμφυτης Διυποκειμενικότητας.

*Λέξεις κλειδιά:* θετικά συναισθήματα, βρέφη, παιγνιώδη διάθεση, διασκέδαση, οικογένεια, γονέας, τριάδες, Διυποκειμενικότητα.